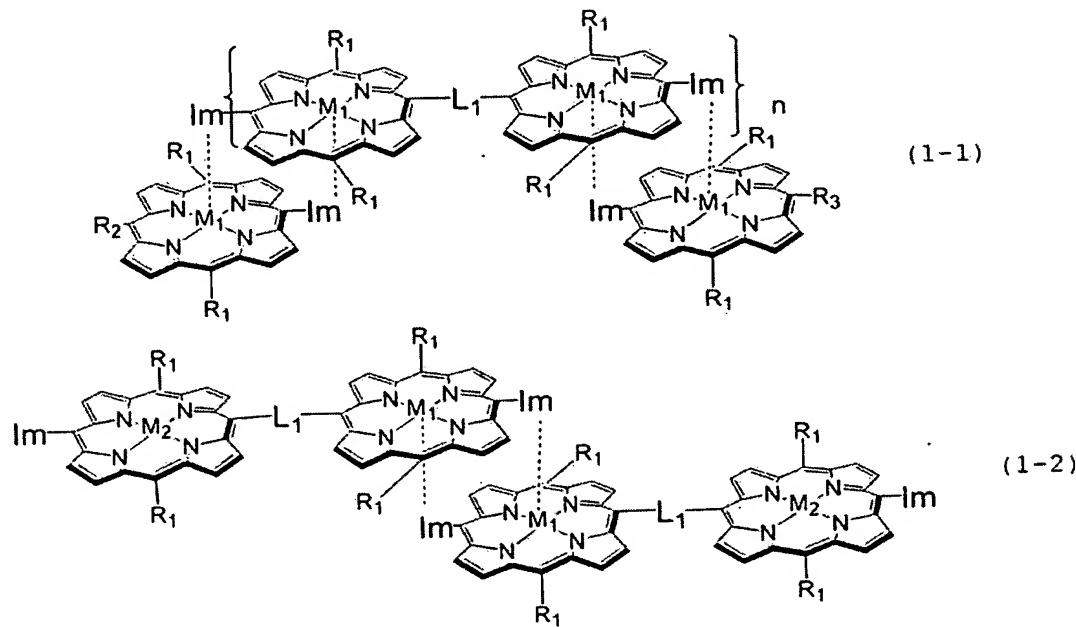


IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A porphyrin array exhibiting a large two-photon absorption property, and being linked with an acetylenic bond(s), represented by formula (1-1) or (1-2):



wherein

R₁ represents a substituted or unsubstituted alkyl group or substituted or unsubstituted aryl group;

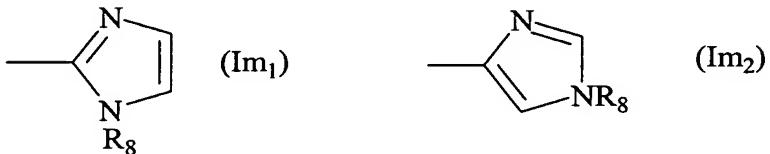
M₁ represents a metal ion capable of serving as a core metal of the porphyrin ring and forming a coordinate bond with the imidazolyl group represented by Im;

M₂ represents either two protons or a metal ion incapable of forming a coordinate bond with the imidazolyl group represented by Im;

R₂ and R₃ may be the same or different, and each independently represents a group selected from the group consisting of (a) to (f):

(a) a porphyrin residue without a core metal or porphyrin complex residue having a core metal represented by M₁ or M₂, (b) a cyclic diimide residue, (c) a dialkylviologen residue, (d) a benzoquinone residue, (e) an N-methylpyrrolidine-fullerene derivative residue and (f) a ferrocene residue;

Im is an imidazolyl group represented by Im₁ or Im₂:

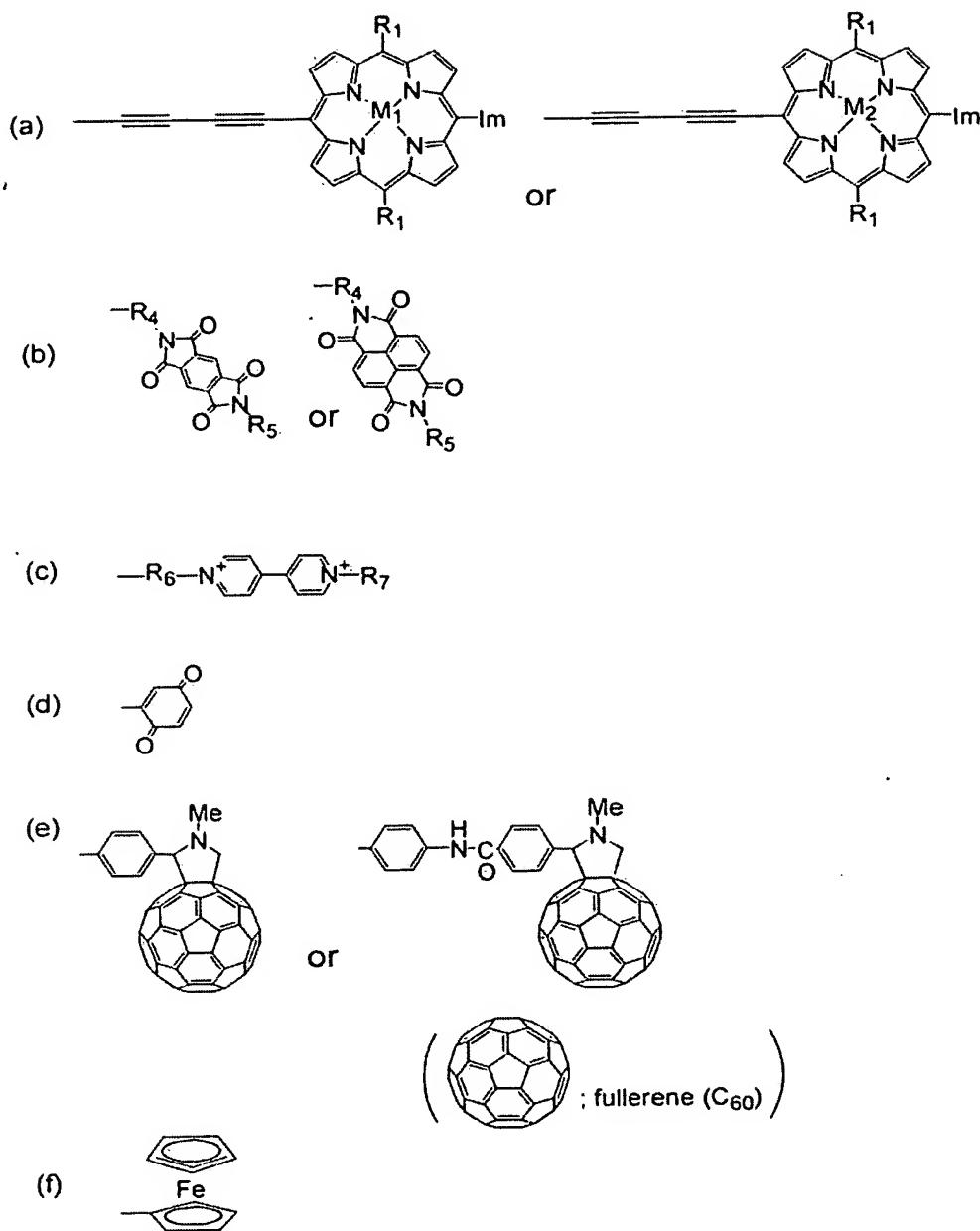


[D]]wherein R₈ represents a methyl group or hydrogen atom[D]];

L₁ represents a linking group represented by (-C≡C-)_m [[()]]wherein m represents an integer of 1 to 3[()]]; and

n represents an integer of 1 or more.

Claim 2 (Original): The porphyrin array according to claim 1, wherein the respective residues (a), (b), (c), (d), (e) and (f) are represented by:



wherein

R₁, M₁, M₂ and Im have the same meaning as defined in claim 1;

R₄ and R₆ each independently represent an alkylene group or arylene group; and

R₅ and R₇ each independently represent an alkyl group, alkoxyalkyl group,

alkoxycarbonyl group or aryl group.

Claim 3 (Original): The porphyrin array according to claim 1, wherein M₁ is an ion of metal selected from the group consisting of zinc, iron, cobalt, ruthenium and gallium.

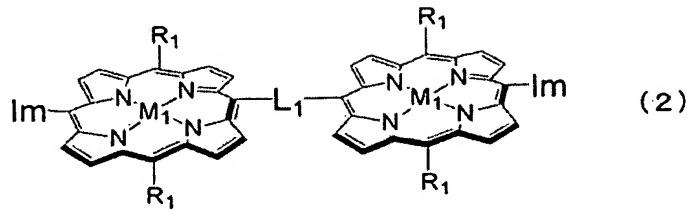
Claim 4 (Original): The porphyrin array according to claim 1, wherein the substituted alkyl group represented by R₁ is selected from the group consisting of an alkoxy carbonyl alkyl group, alkoxy alkyl group, alkenoxy alkyl group and alkenoxy carbonyl alkyl group; and the substituted aryl group represented by R₁ is selected from the group consisting of an alkyl aryl group, alkoxy aryl group, alkoxy carbonyl aryl group, alkenoxy aryl group and alkenoxy carbonyl aryl group.

Claim 5 (Original): The porphyrin array according to claim 1, wherein the number of carbon atoms of the substituted or unsubstituted alkyl group represented by R₁ is 1 to 24; and the number of carbon atoms of the substituted or unsubstituted aryl group represented by R₁ is 6 to 24.

Claim 6 (Original): The porphyrin array according to claim 1, wherein the number of carbon atoms of the alkyl group or the alkylene group represented by R₄ to R₇ is independently selected from 1 to 20; the number of carbon atoms of the alkoxy alkyl group or the alkoxy carbonyl group represented by R₅ and R₇ is independently selected from 2 to 21; and the number of carbon atoms of the aryl group or the arylene group represented by R₄ to R₇ is independently selected from 6 to 20.

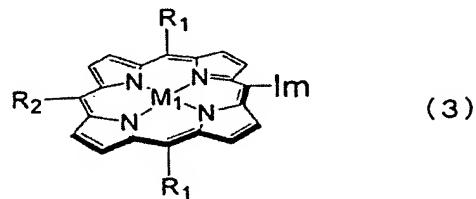
Claim 7 (Original): A method of preparing the porphyrin array represented by the formula (1-1) or (1-2) according to claim 1 comprising:

reacting, in the presence of a polar solvent, an imidazolylporphyrin metal complex represented by the following formula (2),



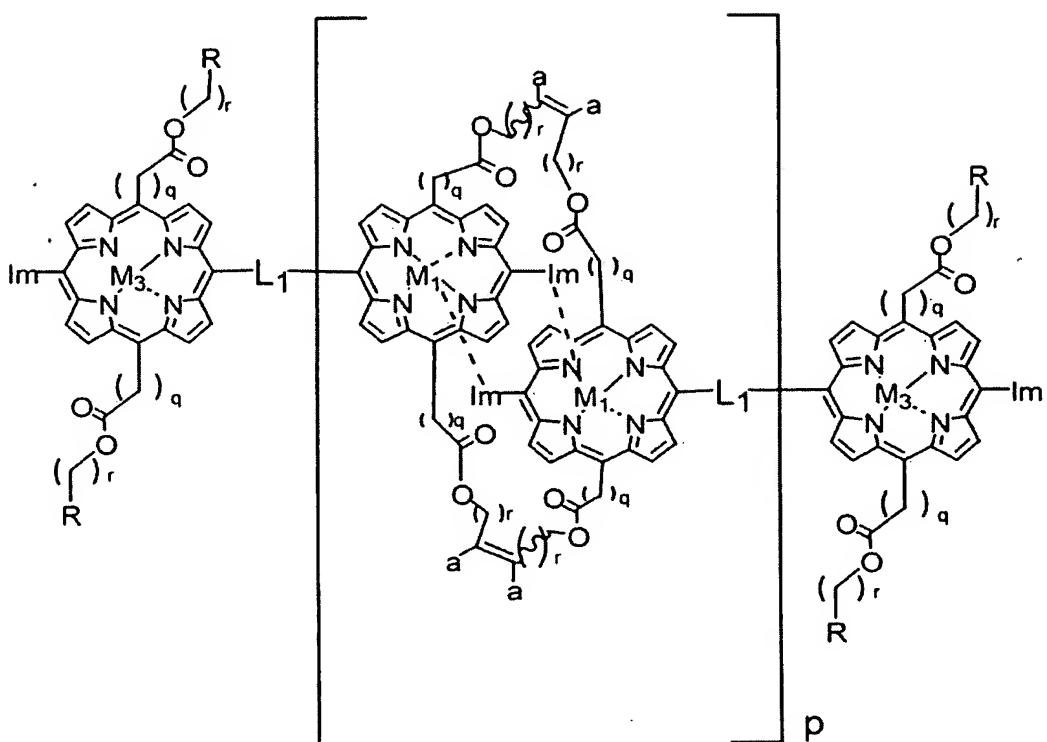
wherein R₁, M₁, L₁ and Im have the same meaning as defined in claim 1

with an imidazolylporphyrin metal complex represented by the following formula (3),



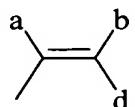
wherein R₁, R₂, M₁ and Im have the same meaning as defined in claim 1.

Claim 8 (Currently Amended): A porphyrin array exhibiting a large two-photon absorption property, and being fixed with a covalent bond(s), represented by formula (4):



(4)

wherein R represents an alkyl group or a group as shown below:



[[()]]wherein a, b and c independently represent H, an alkyl group or aryl group[()]];

M₁, L₁ and Im have the same meaning as defined in claim 1; M₃ represents either two protons or a metal ion selected from the group consisting of those represented by M₁ and M₂; p represents an integer of 1 or more; q represents an integer of 0 to 6; and r represents an integer of 0 to 4.

Claim 9 (New): The porphyrin array according to claim 4, where the substituted alkyl group represented by R₁ is at least one selected from the group consisting of 4-methylphenyl, 4-methoxyphenyl, 4-(ethoxycarbonyl)-phenyl, 4-(2-propenoxy)-phenyl, and 4-(2-propenoxycarbonyl)-phenyl.

DISCUSSION OF THE AMENDMENTS

Claims 1 and 8 are currently amended.

Claims 2-7 are original.

Claim 9 is new.

Claims 1 and 8 were amended to remove the term “large” and unnecessary terms from the claims.

Claim 9 is supported on page 16, lines 13-24 of the specification.

No new matter has been added by the amendments.

Upon entry of the amendment Claims 1-9 will be pending and under active consideration.